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## WHAT IS CLAIMED IS:

1. A device [10] comprising:

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a controller [21];
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a memory [22] coupled to the controller; and

an input interface [20] arranged to received at least two event signals [11],

wherein the controller is arranged to determine a global correlation for the at least two event signal over a first period of time, determine a local corrlation for the at least two event signals over a second period of time which is shorter than the first period of time, determine a deviation between a local correlation vector and a global correlation vector, determine an average deviation from the deviation and determine whether an artifact was detected in one of the at least two event signals.

- 2. The device [10] according to Claim 1 wherein the device is a patient monitoring system.
- 3. The device [10] according to Claim 2 wherein the at least two event signals [11] are patient monitored data signals.
- 4. The device [10] according to Claim 3 further comprising an alarm indicator [40] coupled to the controller [21], the alarm indicator [40] being triggered if at least one of the event signals [11] crosses a preset threshold value and the controller [21] determines that no artifact was detected in the at least one event signal [11].
- 5. The device [10] according to Claim 1 further comprising a memory [22] for recording the at least tow event signals [11].
- 6. The device [10] according to Claim 1, wherein the device is a server forming part of a client-server network.
- 7. A method [Fig. 2] for detecting a signal artifact in an event signal, the method comprising the steps of:

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receiving at least two event signals;

determining a global correlation for the at least two event signal over a first period of time;

determining a local corrlation for the at least two event signals over a second period of time which is shorter than the first period of time;

determining a deviation between a local correlation vector and a global correlation vector;

determining an average deviation from the deviation; and determining whether an artifact was detected in one of the at least two event signals based upon the average deviation.

- 8. The method [Fig. 2] according to Claim 1 wherein the method is used with a patient monitoring system.
- 9. The method [Fig. 2] according to Claim 8 wherein the at least two event signals are patient monitored data signals.
- 10. The method [Fig. 2] according to Claim 9 further comprising the step of providing an alarm indication if at least one of the event signals crosses a preset threshold value and no artifact was detected in the at least one event signal.
- 11. The method [Fig. 2] according to Claim 7 further comprising the step of recording the at least two event signals.
- 12. The method [Fig. 2] according to Claim 7, wherein the method is used in a server forming part of a client-server network.
- 13. A system [10] for detecting a signal artifact in an event signal [11], comprising: means [20] for receiving at least two event signals [11];

means [21] for determining a global correlation for the at least two event signal over a first period of time;

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means [21] for determining a local corrlation for the at least two event signals over a second period of time which is shorter than the first period of time;

means [21] for determining a deviation between a local correlation vector and a global correlation vector;

means [21] for determining an average deviation from the deviation; and means [21] for determining whether an artifact was detected in one of the at least two event signals based upon the average deviation.

- 14. The system [10] according to Claim 13 wherein the system is a patient monitoring system.
- 15. The system [10] according to Claim 14 wherein the at least two event signals [11] are patient monitored data signals.